

(8)
(63) extends radially outward from the motor outer surface when said endshield is coupled to the electric motor.

PLEASE ADD THE FOLLOWING NEW CLAIM

(4) 23. An endshield in accordance with Claim 22 wherein said capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover.

REMARKS

The Office Action mailed May 14, 2002 and the Advisory Action dated August 21, 2002 have been carefully reviewed and the following remarks have been made in consequence thereof. Submitted herewith is a Submission of Marked Claims. In addition, a fee calculation sheet for the newly added claim along with authorization to charge a deposit account in the amount of the calculated fee are submitted herewith.

Claims 1-23 are now pending in this application. Claims 1-22 stand rejected. Claim 23 is newly added.

The rejection of Claims 1 and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,357,161 (Daniels) is respectfully traversed.

Daniels describes an enclosure 3 for a motor assembly 1 including a first endshield 15 and a second endshield 41. Enclosure 3 includes a housing 47 which at least partly covers endshield 15 and a capacitor cover 49. Cover 49 is fastened to endshield 15 using a single screw and pivots with respect to housing 47. Endshield 15 includes a circumferential wall 21 and a plurality of screw holes 23 formed in the corners of wall 21.

Claim 1 recites an endshield for an electric motor, the motor having a housing including an outer surface, the endshield comprising "a body...a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from said motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover."

Daniels does not describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface wherein the endshield includes a body and a capacitor cover integral with the body and extending radially outward from the body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Specifically, Daniels does not describe nor suggest a capacitor cover that is integral with the body of an endshield, wherein capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Rather, in contrast to the present invention, Daniels describes an enclosure for a motor assembly, wherein a capacitor cover is fastened to the endshield using a screw.

Although the Daniels capacitor cover is connected to an endshield, one skilled in the art would not recognize the cover as being integral with the endshield. Applicants respectfully submit that the interpretation of "integral" in the Final Office Action is inconsistent not only with Applicant's use of that term in the specification, but also with the common meaning of "integral," as that term would be understood by one of ordinary skill in the art. See, for example, "integral" as defined in Merriam-Webster's Collegiate Dictionary, Tenth Edition, Merriam-Webster, Inc., Springfield, MA, 1993, at page 607: "1c : formed as a unit with another part." Fabricating the capacitor cover integrally with the endshield addresses a problem not understood or foreseen by Daniels. The solution presented by the present invention shows insight that was contrary to the understandings and expectations of the art. See Schenck v. Nortron Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). For at least the reasons set forth above, Claim 1 is submitted to be patentable over Daniels.

Claim 18 recites a method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing having an outer surface, a capacitor having at least one terminal, and an endshield, the endshield including a body, said method comprising "providing a capacitor cover integral with and extending from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor...mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal."

Daniels does not describe nor suggest a method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing having an outer surface, a capacitor having at least one terminal, and an endshield, the endshield including a body wherein the method includes providing a capacitor cover integral with and extending from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, and mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal. Specifically, Daniels does not describe nor suggest providing a capacitor cover that is integral with an endshield body. Rather, Daniels describes an enclosure for a motor assembly, wherein a capacitor cover is fastened to an endshield using at least one screw. For at least the reasons set forth above, Claim 18 is submitted to be patentable over Daniels.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1 and 18 be withdrawn.

The rejection of Claim 1 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,097,168 (Takekoshi et al.) is respectfully traversed.

Takekoshi et al. describe a motor including a stator which has a stator iron core 6 formed by fitting an inner ring magnetic pole portion 10 into an outer ring yoke portion 5 and a cover 58 having an opening at one end and a bottom at the other end, which is fitted to a bracket 24 to protect a terminal block 50 made of metal and a molded portion 59 formed by curing putty 57. A bulged portion 62 formed at the side wall of the cover 58 is used as an outlet for a cord 56 for power supply.

Claim 1 recites an endshield for an electric motor, the motor having a housing including an outer surface, the endshield comprising "a body...a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from said motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover."

Takekoshi et al. do not describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface wherein the endshield includes a body and a capacitor cover integral with the body and extending radially outward from the body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein the capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Specifically, Takekoshi et al. do not describe nor suggest a capacitor cover that is integral with the body of an endshield, wherein the capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Rather, in contrast to the present invention, Takekoshi et al. describe a bulged portion formed at the side wall of the cover used as an outlet for a cord for a power supply. One skilled in the art would expect a capacitor cover to "cover a capacitor". The bulged portion (62) described by Takekoshi et al. does not cover a capacitor, but rather is merely described as a bulged-out portion of the side wall of the cover used as an outlet for a cord.

Furthermore, it is respectfully submitted that Applicants have not elected to be their own lexicographer in this instance, and that the use of the term "capacitor cover" in Applicants specification and Claims is entirely consistent with its ordinary meaning, as it would be understood by one of ordinary skill in the art at the time the specification was filed. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Takekoshi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claim 1 be withdrawn.

The rejection of Claim 1 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,177,740 (Burns) is respectfully traversed.

Burns describes an electric motor and motor drive unit assembly 10 that includes a motor assembly 12 having a housing 18 that is generally comprised of a cylindrical outer sleeve 20 and an end cap 22. Drive assembly 14 has a case 40 and a cover 42 that define a cavity 44 therebetween. Cavity 44 is sized to hold the motor control circuitry such as an interconnect board 46, a control board 48, and an encoder 50.

Claim 1 recites an endshield for an electric motor, the motor having a housing including an outer surface, the endshield comprising “a body...a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from said motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover.”

Burns does not describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface wherein the endshield includes a body and a capacitor cover integral with the body and extending radially outward from the body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein the capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Specifically, Burns does not describe nor suggest a capacitor cover that is integral with the body of an endshield, wherein the capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Rather, in contrast to the present invention, Burns describes a drive assembly that has a case and a cover that define a cavity therebetween. Applicants respectfully submit that the part of Burns motor that is analogous to the endshield of the present invention is endcap 22 rather than drive assembly cover 42 as stated in the Office Action. As such, cover 42 is not the endshield and end cap 22 does not cover a capacitor. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Burns.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claim 1 be withdrawn.

The rejection of Claims 1, 3-5, and 18-21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,548,169 (Iwasa et al.) is respectfully traversed.

Iwasa et al. describe a single-phase induction motor 1 includes a stator 2 and a rotor 3. The stator 2 is fixedly mounted in a case 4 and the case 4 is closed by a bracket 5. A motor winding 6 is disposed in the case 4 and bearings 7 and 8 for rotatably supporting the rotor 3 are disposed at the sides of the case 4 and the bracket 5. The case 4 and the bracket 5 are

mounted by means of screws not shown. A ring-shaped capacitor 11 is disposed in the case 4 in which the bracket 5 of the motor 1 is mounted. The ring-shaped capacitor 11 is mounted on an inner side of the bracket 5 by means of an adhesive agent, for example.

Claim 1 recites an endshield for an electric motor, the motor having a housing including an outer surface, the endshield comprising "a body...a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from said motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover."

Iwasa et al. do not describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface wherein the endshield includes a body and a capacitor cover integral with the body and extending radially outward from the body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein the capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Specifically, Iwasa et al. do not describe nor suggest a capacitor cover that extends radially outward from the body of an endshield such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein the capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Rather, in contrast to the present invention, Iwasa et al. describe a ring-shaped capacitor that is disposed inside a case in which a bracket of a motor is mounted. The ring-shaped capacitor is mounted on an inner side of the bracket by means of an adhesive agent. As described in Iwasa et al., a rotor shaft penetrates a center portion of the bracket 5 and an inner peripheral portion of the center portion is in contact with an outer peripheral portion of a bearing portion 8a which supports the bearing of the shaft. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Iwasa et al.

Claims 3-5 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 3-5 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 3-5 likewise are patentable over Iwasa et al.

Claim 18 recites a method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing having an outer surface, a capacitor having at least one terminal, and an endshield, the endshield including a body, said method comprising "providing a capacitor cover integral with and extending from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor...mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal."

Iwasa et al. do not describe nor suggest a method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing having an outer surface, a capacitor having at least one terminal, and an endshield, the endshield including a body wherein the method includes providing a capacitor cover integral with and extending from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, and mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal. Specifically, Iwasa et al. do not describe nor suggest providing a capacitor cover that is integral with an endshield body. More specifically, Iwasa et al. do not describe nor suggest providing a capacitor cover that extends from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor. Rather, in contrast to the present invention, Iwasa et al. describe a ring-shaped capacitor that is disposed in a case in which a bracket of a motor is mounted. The ring-shaped capacitor is mounted on an inner side of the bracket by means of an adhesive agent. For at least the reasons set forth above, Claim 18 is submitted to be patentable over Iwasa et al.

Claims 19-21 depend, directly or indirectly, from independent Claim 18. When the recitations of Claims 19-21 are considered in combination with the recitations of Claim 18, Applicants submit that dependent Claims 19-21 likewise are patentable over Iwasa et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 3-5 and 18-21 be withdrawn.

The rejection of Claims 7 and 10-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,834,869 (Morgan et al.) is respectfully traversed.

Morgan et al. describe a blower motor housing 60 for an electric motor 40 used in combination with a fuel burner 10. Motor housing 60 has a generally "cup" shaped configuration with an open end 66 that communicates with an opening 16 in a side wall 14 of a housing 12 of fuel burner 10. Motor housing 60 is mounted to burner housing 12 with open end 66 in register with opening 16 in burner housing 12, thereby joining an interior of motor housing 60 with an interior of burner housing 12. Electric motor 40 is mounted within motor housing 60 with at least a portion of a stator winding 86 extending axially beyond open end 66 of motor housing 60 and into the interior of burner housing 12. A squirrel cage blower wheel 50 is mounted to a rotor shaft 46 substantially concentric with stator winding 86 and extends at least partially along the axial length of stator winding 86 such that, during operation of burner 10, cool intake air is moved past stator winding 86 as it is drawn into blower wheel 50. Motor housing 60 includes a plurality of mounting ears each including a slot.

Claim 7 recites an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield comprises "a body...at least one mounting ear extending from said body".

Morgan et al. do not describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield includes a body and at least one mounting ear extending from the body. Specifically, Morgan et al. do not describe nor suggest an endshield of any sort. Rather, in contrast to the present invention, Morgan et al. describe a housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, in contrast to the present invention, Morgan et al. describe a plurality of mounting ears extending from a housing that does not include an endshield. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Morgan et al.

Claims 10-12 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 10-12 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 10-12 likewise are patentable over Morgan et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 7 and 10-12 be withdrawn.

The rejection of Claims 2 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Iwasa et al. in view of U.S. Patent No. 5,742,108 (Kuribayashi et al.) is respectfully traversed.

Iwasa et al. is described above. Kuribayashi et al. describe an intake vent of a duct 4, and a cylindrical duct cover 15 with one end surface 15a being blocked. While another opened end surface is facing the rear side bracket 1, the duct cover 15 is attached so as to cover an end surface opening of the rear side bracket 1. A plurality of mounting flanges 16 are equally spaced on an outer periphery of the duct cover. An annular mounting flange 21 extends around the outer periphery of a duct cover 15, a plurality of through-bolt passing holes 22 which are provided in the annular mounting flange 21 to have an elongated hole structure extending circumferentially. The through-bolt passing holes 22 in the duct cover 15 include the elongated holes extending along the mounting flange 21.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Iwasa et al. with Kuribayashi et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the body with at least one mounting ear extending from said body, said at least one mounting ear having a slot as taught by Kuribayashi et al. for the purpose discussed above" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather,

there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, Iwasa et al. describe a ring-shaped capacitor that is disposed in a case in which a bracket of a motor is mounted. The ring-shaped capacitor is mounted on an inner side of the bracket by means of an adhesive agent, and Kuribayashi et al. describe an intake vent of a duct and a cylindrical duct cover. A plurality of mounting flanges are equally spaced on an outer periphery of the duct cover. Alternatively, Kuribayashi et al. describe an annular mounting flange that extends around the outer periphery of the duct cover and a plurality of through-bolt passing holes which are provided in the annular mounting flange to have an elongated hole structure extending circumferentially. Notably, Kuribayashi et al. describes an embodiment wherein mounting ears have a round hole for a fastener and an alternative embodiment wherein a circumferential flange has a plurality of slots for fasteners. Kuribayashi et al. do not describe ears with slots. Accordingly, Applicants respectfully submit that neither Iwasa et al. nor Kuribayashi et al. describe or suggest mounting ears with slots and Kuribayashi et al. describe that when slots are desired, a flange must be used rather than mounting ears.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present

invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 2 and 6 depend, directly or indirectly, from independent Claim 1 which recites an endshield for an electric motor, the motor having a housing including an outer surface, the endshield comprising "a body...a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from said motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover."

Neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield includes a body and a capacitor cover integral with the body extending radially outward from the body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor, wherein the capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between the endshield body and the capacitor cover. Rather, in contrast to the present invention, Iwasa et al. describe a ring-shaped capacitor that is disposed in a case in which a bracket of a motor is mounted. The ring-shaped capacitor is mounted on an inner side of the bracket by means of an adhesive agent. Accordingly, Iwasa et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, in contrast to the present invention, Applicants respectfully submit that Iwasa et al. describe a ring-shaped capacitor that is mounted on an inner side of a bracket by means of an adhesive agent that does not include an endshield. Furthermore, Kuribayashi et al. describe an intake vent of a duct and a cylindrical duct cover with a plurality of mounting flanges are equally spaced on an outer periphery of the duct cover. Additionally, Kuribayashi does not describe nor suggest a recess sized to receive a fastener on either mounting flanges designated 16 or 21. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Iwasa et al. in view of Kuribayashi et al.

Claims 2 and 6 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2 and 6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2 and 6 likewise are patentable over Iwasa et al. in view of Kuribayashi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 2 and 6 be withdrawn.

The rejection of Claims 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Morgan et al. in view of U.S. Patent No. 5,945,272 (Ochi et al.) is respectfully traversed.

Morgan et al. are described above. Ochi et al. describe an alternator for motor vehicles having a mounting structure suitable for mounting to an engine. The mounting structure includes a front bracket 1, a stator 5, a rear bracket 6, and at least one mounting projecting section 21a having U-grooves 31a. Section 21a is formed integrally with each of front bracket 1 and rear bracket 6 thereby constituting a housing for mounting the alternator to an engine.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Morgan et al. with Ochi et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to include in the at least one mounting ear with an opening extending therethrough and a first side, and to extend the slot through said mounting ear from said opening through said first side as taught by Ochi et al." suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, Morgan et al. describe a housing including a plurality of mounting ears and having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing, but do not describe nor suggest that the housing includes an endshield, and Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. Accordingly, Applicants respectfully submit that one skilled in the art would not be motivated to replace the mounting ears described in Morgan et al. with a front or rear alternator bracket including at least one mounting projecting section having U-grooves, as described in Ochi et al., because the housing described in Morgan et al. does not include an endshield.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Morgan et al. nor Ochi et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 8 and 9 depend, directly or indirectly, from independent Claim 7 which recites an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield comprises "a body...at least one mounting ear extending from said body".

Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield includes a body and at least one mounting ear extending from the body. Rather, in contrast to the present invention, Morgan et al. describe a housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Applicants respectfully submit that Morgan et al. describe a plurality of mounting ears extending from a housing that does not include an endshield. Furthermore, Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Morgan et al. in view of Ochi et al.

Claims 8 and 9 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 8 and 9 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8 and 9 likewise are patentable over Morgan et al. in view of Ochi et al.

Claim 13 recites an endshield for an electric motor, wherein the endshield comprises "a body and at least one mounting ear extending from said body".

Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, wherein the endshield includes a body and at least one mounting ear extending from the body. Rather, Morgan et al. describe a housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor

suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Applicants respectfully submit that Morgan et al. describe a plurality of mounting ears extending from a housing that does not include an endshield. Furthermore, Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. For at least the reasons set forth above, Claim 13 is submitted to be patentable over Morgan et al. in view of Ochi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 8, 9, and 13 be withdrawn.

The rejection of Claims 14-17 under 35 U.S.C. § 103(a) as being unpatentable over Iwasa et al. in view of U.S. Patent No. 5,742,108 (Kuribayashi et al.) is respectfully traversed.

Iwasa et al. and Kuribayashi et al. are described above.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Iwasa et al. with Kuribayashi et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the endshield with at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough as taught by Kuribayashi et al. for the purpose discussed above" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte

Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, Iwasa et al. describe a ring-shaped capacitor that is disposed in a case in which a bracket of a motor is mounted. The ring-shaped capacitor is mounted on an inner side of the bracket by means of an adhesive agent, and Kuribayashi et al. describe an intake vent of a duct and a cylindrical duct cover. A plurality of mounting flanges are equally spaced on an outer periphery of the duct cover. Alternatively, Kuribayashi et al. describe an annular mounting flange that extends around the outer periphery of the duct cover and a plurality of through-bolt passing holes which are provided in the annular mounting flange to have an elongated hole structure extending circumferentially. Notably, Kuribayashi et al. describes an embodiment wherein mounting ears have a round hole for a fastener and an alternative embodiment wherein a circumferential flange has a plurality of slots for fasteners. Kuribayashi et al. do not describe ears with slots. Accordingly, Applicants respectfully submit that neither Iwasa et al. nor Kuribayashi et al. describe or suggest mounting ears with slots and Kuribayashi et al. describe that when slots are desired, a flange must be used instead of mounting ears.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present

invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 15-17 depend, directly or indirectly, from independent Claim 14 which recites an electric motor assembly comprising "a motor housing...a stator mounted in said housing and comprising a bore therethrough, said stator having at least one main winding and at least one auxiliary winding...a rotor core rotatably mounted in said housing and extending through said stator bore...a capacitor in series with said auxiliary winding and comprising at least one capacitor terminal...an endshield connected to said housing, said endshield comprising a body and at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough."

Neither Iwasa et al. nor Kuribayashi et al., considered alone or in combination, describe nor suggest an electric motor assembly including a motor housing, a stator mounted in the housing and including a bore therethrough, the stator having at least one main winding and at least one auxiliary winding, a rotor core rotatably mounted in the housing and extending through the stator bore, a capacitor in series with the auxiliary winding and that includes at least one capacitor terminal, an endshield connected to the housing, the endshield including a body and at least one mounting ear extending from the body, the at least one mounting ear having a slot extending completely therethrough. Rather, Iwasa et al. describe a ring-shaped capacitor that is disposed in a case in which a bracket of a motor is mounted with the ring-shaped capacitor mounted on an inner side of the bracket by means of an adhesive agent. Accordingly, Iwasa et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Applicants respectfully submit that Iwasa et al. describe a ring-shaped capacitor that is mounted on an inner side of a bracket by means of an adhesive agent that does not include an endshield. Furthermore, Kuribayashi et al. describe an intake vent of a duct and a cylindrical duct cover with a plurality of mounting flanges are equally spaced on an outer periphery of the duct cover. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Iwasa et al. in view of Kuribayashi et al.

Claims 15-17 depend, directly or indirectly, from independent Claim 14. When the recitations of Claims 15-17 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-17 likewise are patentable over Iwasa et al. in view of Kuribayashi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 14-17 be withdrawn.

The rejection of Claim 22 under 35 U.S.C. § 103(a) as being unpatentable over Morgan et al. in view of U.S. Patent No. 4,475,873 (Jensen et al.) is respectfully traversed.

Morgan et al. is described above. Jensen et al. describe a pump including a pump chamber 1, a rotor chamber 2, a stator chamber 9, a motor housing 17 and a connection box 20 mounted on the motor housing 17. The bottom of the connection box 20 includes flushing apertures, through which some screws which are screwed into tapped holes 36 in the motor housing 17 may be screwed.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Morgan et al. nor Jensen et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Morgan et al. with Jensen et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to extend a capacitor cover radially outward from the body as taught by Jensen et al." suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine

such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Morgan et al. nor Jensen et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 22 depends from independent Claim 7 which recites an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield comprises "a body...at least one mounting ear extending from said body, said at least one mounting ear having a slot."

Neither Morgan et al. nor Jensen et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, the motor having a housing including an outer surface, wherein the endshield includes a body and at least one mounting ear extending from the body, the at least one mounting ear having a slot. Specifically, neither Morgan et al. nor Jensen et al., considered alone or in combination, describe nor suggest an endshield including a body and at least one mounting ear extending from the body, the at least one mounting ear having a slot. Rather, Morgan et al. describe a housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel

burner housing. Furthermore, Jensen et al. describe a pump including a motor housing 17 and a connection box 20 mounted on the motor housing 17. The bottom of the connection box 20 includes flushing apertures, through which some screws which are screwed into tapped holes in the motor housing may be screwed. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Morgan et al. in view of Jensen et al.

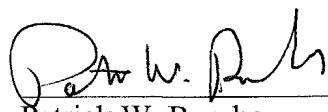
Claim 22 depends from independent Claim 7. When the recitations of Claim 22 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claim 22 likewise is patentable over Morgan et al. in view of Jensen et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 22 be withdrawn.

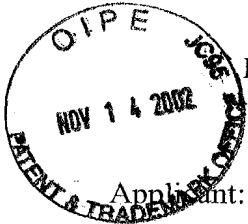
Newly added Claim 23 depends indirectly from independent Claim 7. When the recitations of Claim 23 are considered in combination with the recitations of Claim 7, Applicants submit that Claim 23 likewise is patentable over the cited art.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brian D. Franz, et al.

Serial No.: 09/681,866

Filed: June 19, 2001

For: END SHIELD FOR AN ELECTRIC MOTOR

Art Unit: 2834

Examiner: Dang D. Le

SUBMISSION OF MARKED UP CLAIMS

Commissioner for Patents
Box RCE
Washington, D.C. 20231

Sir:

Submitted herewith are marked up claims in accordance with 37 C.F.R. Section 1.121(c)(1)(ii).

IN THE CLAIMS

1. (twice amended) An endshield for an electric motor, the motor having a housing including an outer surface, said [end shield] endshield comprising:

a body; and

a capacitor cover integral with said body and extending radially outward from said body such that said capacitor cover extends radially outward from the motor outer surface when said endshield is coupled to the electric motor, said capacitor cover configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover.

7. (once amended) An endshield for an electric motor, the motor having a housing including an outer surface, said [end shield] endshield comprising :

a body; and

at least one mounting ear extending from said body, said at least one mounting ear having a slot.

14. (once amended) An electric motor assembly comprising:

a motor housing;

a stator mounted in said housing and comprising a bore therethrough, said stator having at least one main winding and at least one auxiliary winding;

a rotor core rotatably mounted in said housing and extending through said stator bore;

a capacitor in series with said auxiliary winding and comprising at least one capacitor terminal; and

an endshield connected to said housing, said endshield comprising a body and at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough.

15. (once amended) An electric motor assembly in accordance with Claim 14 wherein said endshield further comprises a capacitor cover extending from said body and configured to cover said at least one capacitor terminal and maintain said at least one capacitor terminal between said endshield body and said capacitor cover.

18. (twice amended) A method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing having an outer surface, a capacitor having at least one terminal, and an endshield, the endshield including a body, said method comprising:

providing a capacitor cover integral with and extending from the endshield body such that the capacitor cover extends radially outward from the motor outer surface when the endshield is coupled to the electric motor; and

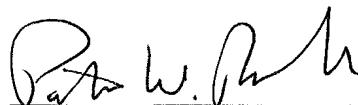
mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal.

22. (once amended) An endshield in accordance with Claim 7 further comprising a capacitor cover extending radially outward from said body such that said capacitor cover extends radially outward from the motor outer surface when said endshield is coupled to the electric motor.

PLEASE ADD THE FOLLOWING NEW CLAIM

23. An endshield in accordance with Claim 22 wherein said capacitor cover is configured to cover at least one capacitor terminal and maintain the at least one capacitor terminal between said endshield body and said capacitor cover.

Respectfully Submitted,



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